

## App. No. 10/724,742 Ex'r E. File; Group Art Unit 2611 Reply to Office Action of January 17, 2007

## **NEW DRAWING SHEET**

Reconstructing simulated input data symbols  $(x'_k[n])$  that simulate the original data symbols  $(X_k[n])$ 

Delaying the actual received data symbols  $(R_k[n])$  such that the delayed actual received data symbols  $(Q_k[n])$  are synchronous to the simulated input data symbols  $(x'_k[n])$ 

Calculating a channel response estimate  $(W_k[n])$  of one subchannel k based on said delayed actual received data symbols  $(Q_k[n])$  and said simulated input data symbols  $(x'_k[n])$  according to the LMS algorithm

Estimating virtual received data symbols  $(Y_k[n])$  based on said channel response estimate  $(W_k[n])$  and the simulated input data symbol  $(X'_k[n])$ 

Calculating a different quantity  $(e_k[n])$  between the delayed actual received data symbol  $(Q_k[n])$  and the estimated virtual received data symbols  $(Y_k[n])$  to represent the channel noise of said subchannel k.

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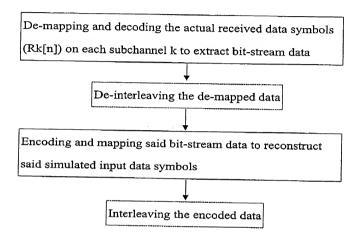


FIG. 9